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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/710,879	08/10/2004	James W. Adkisson	BUR920040092US1	4878
30449	7590	02/10/2006	EXAMINER	
SCHMEISER, OLSEN + WATTS			TO, TUYEN P	
3 LEAR JET LANE			ART UNIT	
SUITE 201			PAPER NUMBER	
LATHAM, NY 12110			2825	

DATE MAILED: 02/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/710,879	ADKISSON ET AL.	
	Examiner	Art Unit	
	Tuyen To	2825	TT

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 02 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 August 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☒ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☒ Claim(s) 1-20 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 August 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>8/18/04; 8/10/04</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This is a response to the communication filed on 08/10/2004. Claims 1-20 are pending.

This application is in condition for allowance except for the following formal matters:

Claim Objections

1. **Claim 1** is objected to because the recited "likely " in line 17 is not a definite claim language. Appropriate correction is required.

Claim 11 is objected to because the recited "likely " in line 17 is not a definite claim language. Appropriate correction is required.

Claim 14 is objected to because the recited "likely " in line 13 is not a definite claim language. Appropriate correction is required.

Claim 15 is objected to because the recited "likely " in line 23 is not a definite claim language. Appropriate correction is required.

Claim 18 is objected to because the recited "likely " in line 6 is not a definite claim language. Appropriate correction is required.

Examiner suggests the "likely" is removed from the above claims.

2. **Claim 14** is objected to because "characteristics" and "id" in the recited phrase "a present physical characteristics which id present in the first design structure" (lines 8-9) appear to be typing errors. Examiner suggests rephrasing as "a present physical characteristic which is present in the first design structure". Appropriate correction is required.

Reasons for Allowance

3. **Claims 1-20** would be allowable if the above-mentioned claim objections are overcome.

4. The following is an examiner's statement of reasons for allowance:

Claims 1-10 would be allowable because the prior art of record does not teach or fairly suggest a method for defect diagnosis of a circuit design, the method comprising the steps of:

(a) identifying M design structures and N physical characteristics of the circuit design,

wherein M and N are positive integers,

wherein each design structure of the M design structures is testable as to pass or fail, and

wherein each physical characteristic of the N physical characteristics is present in at least one design structure of the M design structures;

(b) for each design structure of the M design structures of the circuit design, determining a fail rate and determining whether the fail rate is high or low; and

(c) if every design structure of the M design structures in which a physical characteristic of the N physical characteristics is present has a high fail rate, then flagging the physical characteristic as being contained at least a defect.

Claims 11-14 would be allowable because the prior art of record does not teach or fairly suggest a method for defect diagnosis of a circuit design, the method comprising the steps of:

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(a) identifying M design structures and N physical characteristics of the circuit design,

wherein M and N are positive integers,

wherein each design structure of the M design structures is testable as to pass or fail, and

wherein each physical characteristic of the N physical characteristics is present in at least one design structure of the M design structures;

(b) determining a fail rate for each design structure of the M design structures of the circuit design; and

(c) analyzing the fail rates of a plurality of design structures of the M design structures so as to determine whether to flag the physical characteristic as being contained at least a defect.

Claims 15-20 would be allowable because the prior art of record does not teach or fairly suggest a computer program product, comprising a computer usable medium having a computer readable program code embodied therein, said computer readable program code comprising an algorithm adapted to implement a method for analyzing defects of a circuit design, wherein a fail rate for each of a plurality of design structures is provided, said method comprising the steps of :

(a) identifying M design structures from the plurality of design structures and N physical characteristics of the circuit design,

wherein M and N are positive integers, and

wherein each physical characteristic of the N physical characteristics is present in at least one design structure of the M design structures;

(b) for each design structure of the M design structures of the circuit design, determining whether the fail rate of the design structure is high or low; and

(c) if every design structure of the M design structures in which a physical characteristic of the N physical characteristics is present has a high fail rate, then flagging the physical characteristic as being contained at least a defect.

5. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion


6. Prosecution on the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.

7. A shortened statutory period for reply to this action is set to expire TWO MONTHS from the mailing date of this letter.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tuyen To whose telephone number is (571) 272-8319. The examiner can normally be reached on 9:00am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jack Chiang can be reached on (571) 272-7483. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Tuyen To
Patent Examiner
AU 2825



VUTHE SIEK
PRIMARY EXAMINER